

PHENIX

WEEKLY PLANNING

8/30/2007

Don Lynch

2007 Summer Shutdown Schedule

<u>Item</u>	<u>Start</u>	<u>Complete</u>
RPC Factory set up	in progress	9/28
HBD West repair	in progress	9/28?
MPC South upgrade/ bench tests	in progress	9/20
MuTr Capacitor Decap	in progress	9/30
MuTr FEE Prototype (wp done)	in progress	9/20
Reinstall MPC North (wp done)	in progress	9/20
DOE Safety Audit (intensive)	in progress	8/31?
Neutron shield support design & install.	In progress	9/30
Labor Day Holiday & Floating Holiday	9/3	9/4
Repair RXNP Phototube	9/5	9/7
EC/EmCal survey	9/5	9/30
Move CM North	9/20	9/21
Install CM access ladder (wp needed)	9/21	9/30
Reinstall MPC South	9/24	9/28

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2007 Summer Shutdown Schedule (cont'd)

Remove HBD East	9/30?	10/7?
HBD Pre survey at SB	9/23?	9/30?
HBD West Mechanical/Gas Reinstall	9/30?	10/7?
HBD EAST Mechanical/Gas Reinstall	11/15?	11/28?
HBD Electrical Reinstall	10/7?	12/15?
HBD installation survey	10/1?	12/22?
Reinstall MMS East Vert. Lampshade	10/1	10/5
EC Roll In	10/8	10/10
C-A fold scaffolding	10/8	10/8
Move MuID collars to IR	10/9	10/9
Roll in-to IR and North to run pos.	10/10	10/11
PHENIX techs reconnect water, elect., gas, fibers	10/12	10/19
InstaCarpenters restore scaffolding, Re-install lift & ladder, re-connect gas sniffers	10/12	10/19
Mike Rau re-install lift wiring, Re-connect TOF blower	10/12	10/19
DC East repair	10/12	10/19
HBD/MPC/Other TBD Commissioning	10/1	10/31
Start of Run 8	11/1	11/1

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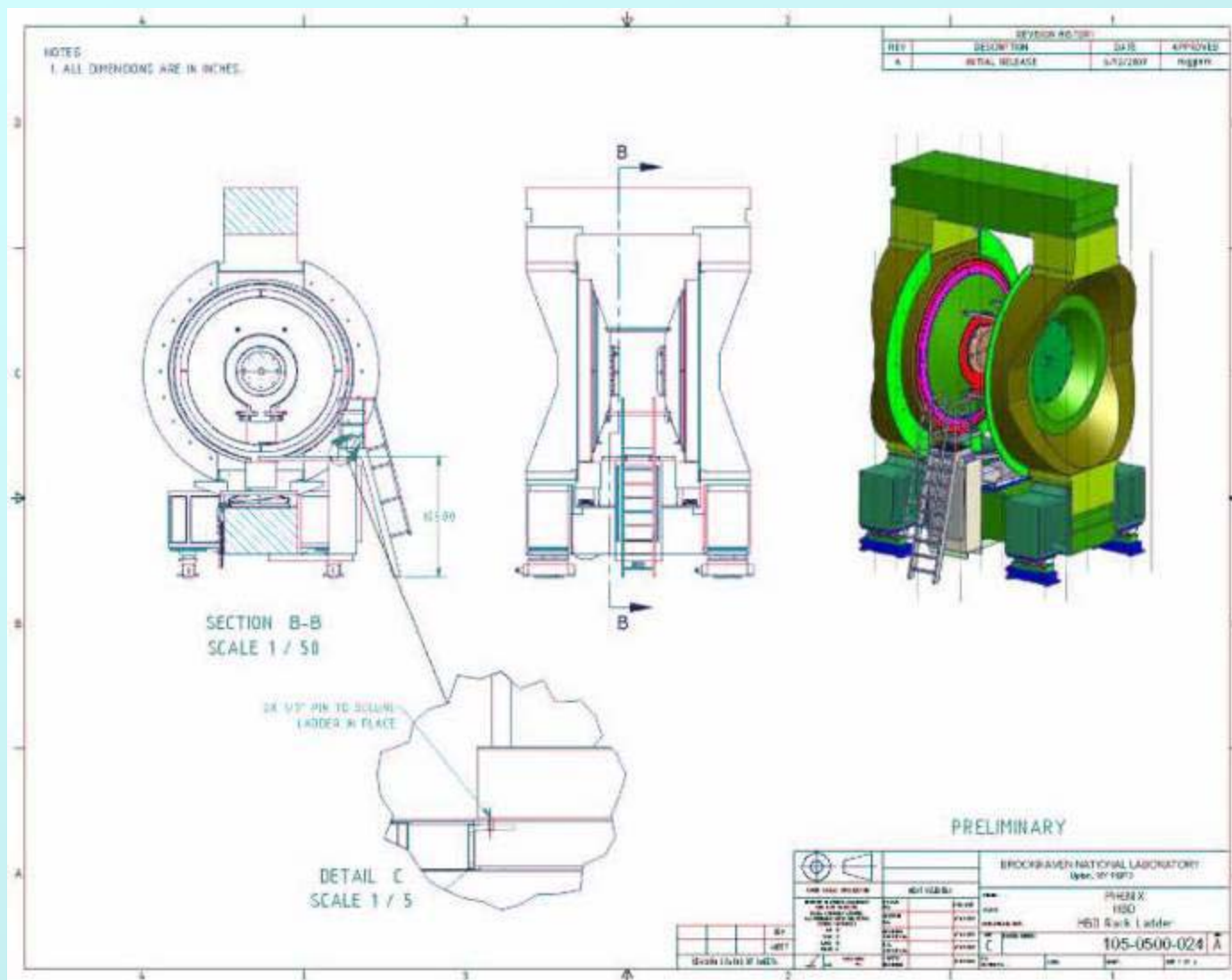
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CM Ladder/Stair Shutdown Access

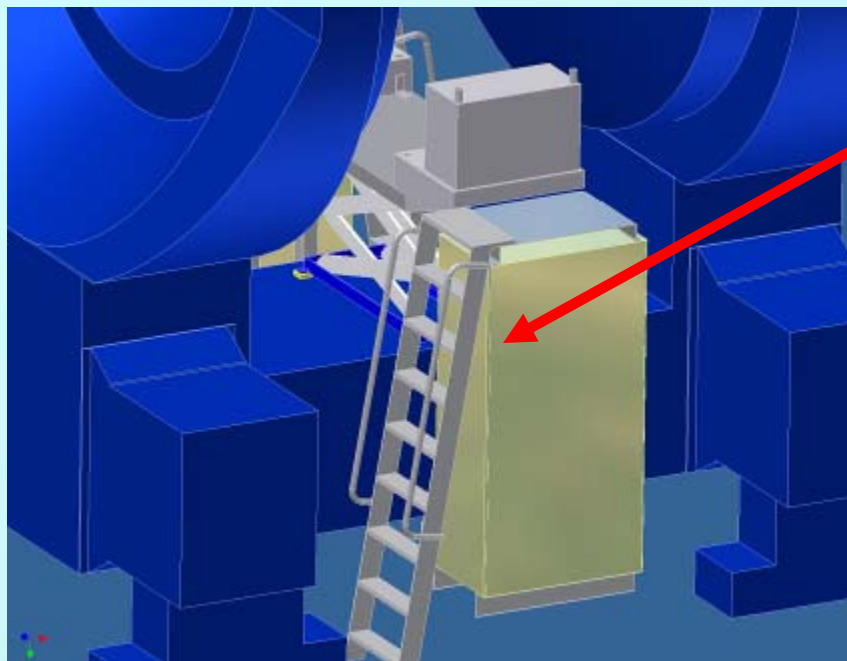
TECHNICAL SUPPORT NOON



- PO pinned
Waiting for
delivery
- Delivery ~9/21

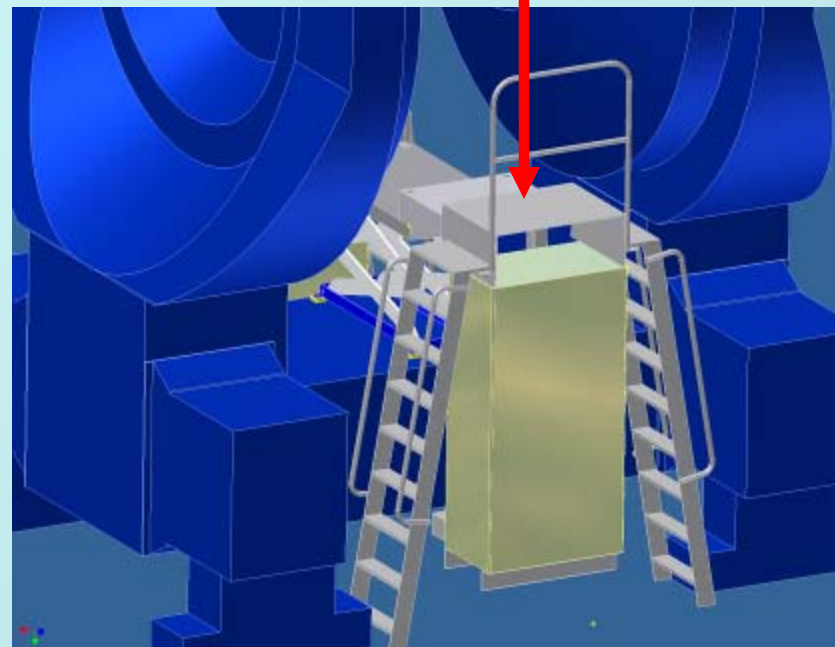
CM Ladder/Stair Run Access

TECHNICAL SUPPORT 2007



East access

West access



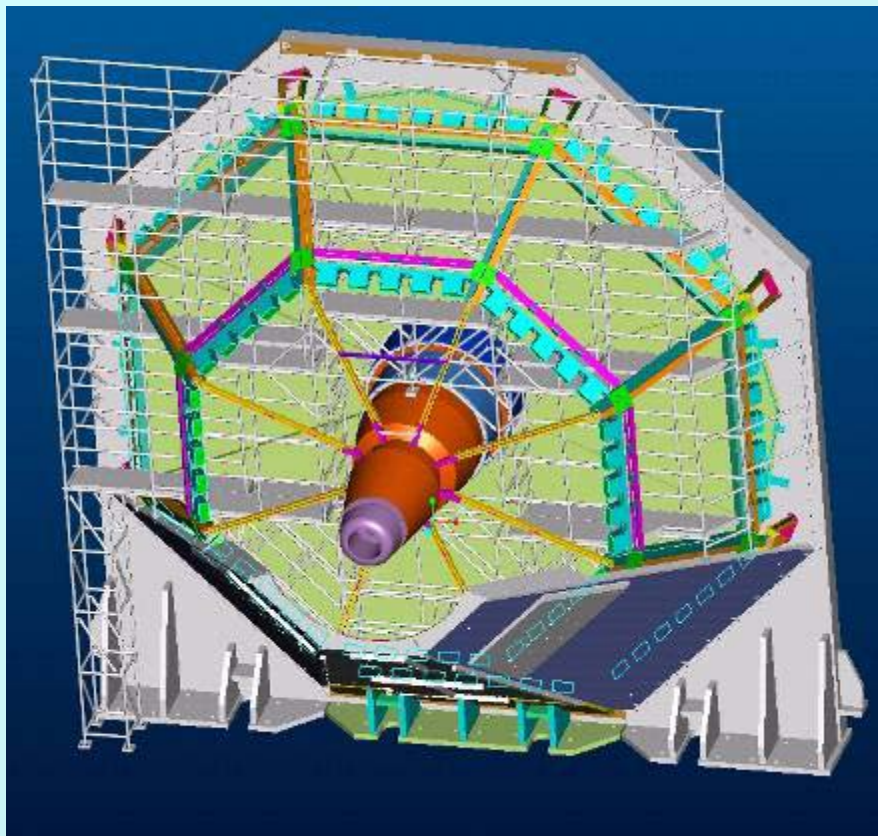
Features:

- ~70 deg. Alum ships ladder
- (1 or 2) lifts off to store vertically for run and/or to access rack doors.
- Step up platform above rack and cables.

- Can be used on either east or west side
- Hand rails on ladders. Safety rail on platform

Station 1 , 2, 3 access plan

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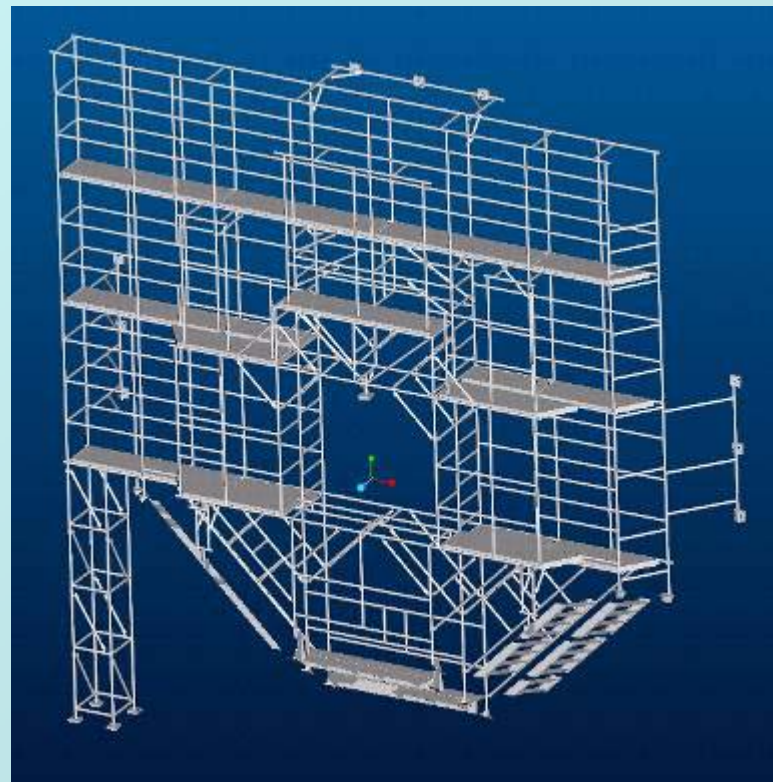


Use existing MMN scaffolding components

Sta. 1: modify to adapt to rails

Sta 2N & 3N: Internal to MMN only adapt to work with most lampshades on.

Sta 2S & 3S: TBD



RPC Factory

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Work is continuing. Please make sure that all work in 912 is properly planned and approved.

8/30/2007

Weekly Planning Meeting

RPC Factory Issues

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A. Factory Set Up:

1. PHENIX tech support:

Gas: John T.
Elect: Frank T.
Mech: Kenny J.

2. Electrical work moving complete ~9/5.

3. floor to be painted after elec. 9/10-9/12

4. HVAC specs 18,000 BTU AC (not ordered yet) 4 HEPA filters, internally recirculated (done)

5. Gas distribution design in progress start installing next week

B. Safety Issues: Per Yousef's Minutes from review

- Calib./testing of SF6 monitors
- Gas system schematic in progress
- Fire protection *piggy backed on 912 alarms. Replace tarps with fire rated hole covers*
- Gas environmental impact *Ralf update review numbers when gas system design is complete*
- Electronics/equipment review
- Factory users safety manual *interim Worker plan complete; final production version needed*

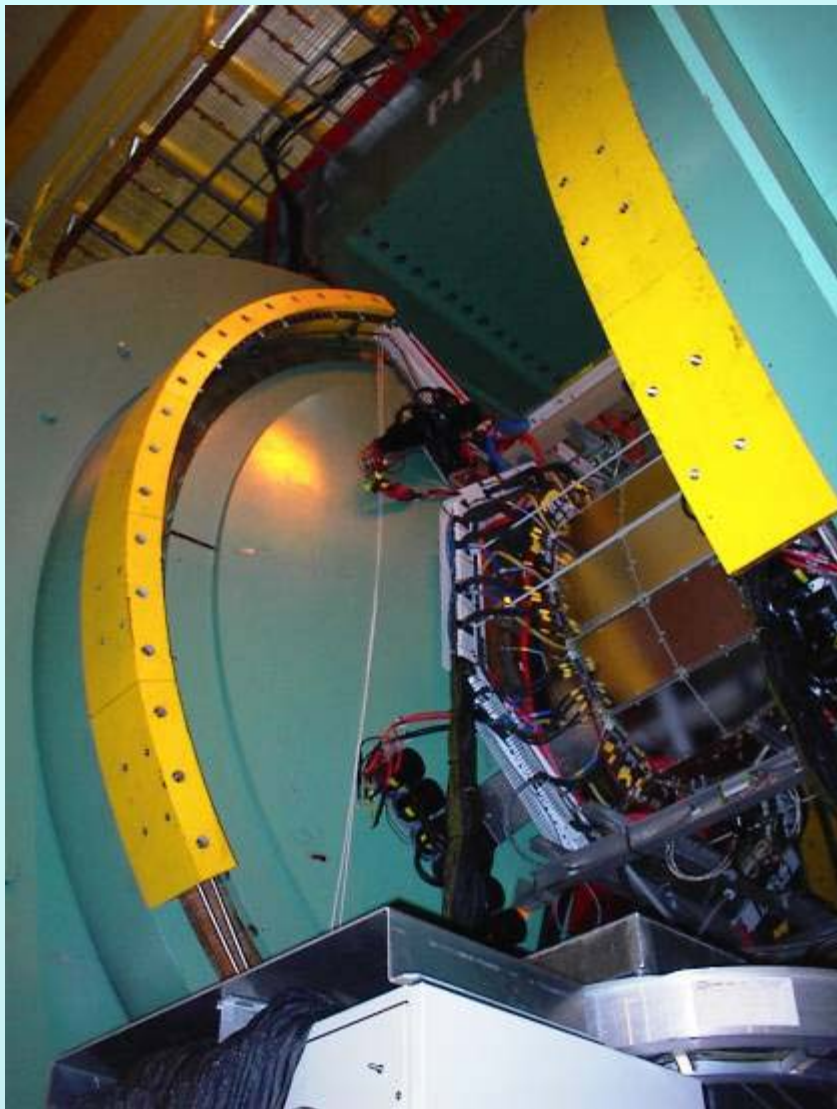
C. Factory Equipment

- Design & Fabrication (cosmic ray test stand - mostly done)
- Layout & installation shelves
A-frame is set up

RXNP Repair

Mike Lenz to perform repair next week.

Access from CM lift table



Procedure for replacing PMT

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- Label new PMT with tape
- Disconnect old PMT HV and signal cables
- Cut cable ties
- Unscrew plastic cap
- Remove RTV from notch in plastic cap (use scalpel, loosen with chemical?)
- Remove plastic cap from PMT
- Remove black electrical tape connecting PMT and cookie
- Detach PMT from cookie
- Wipe off optical grease



Damaged PMT

RTV that must
be removed



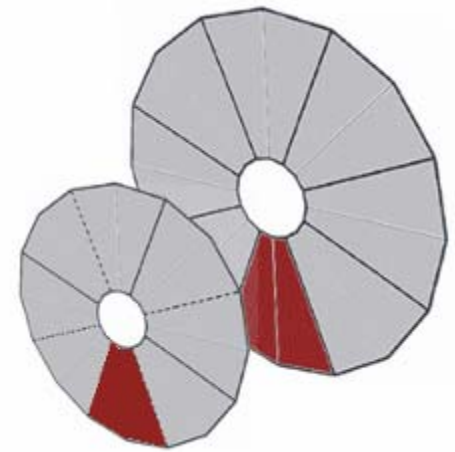
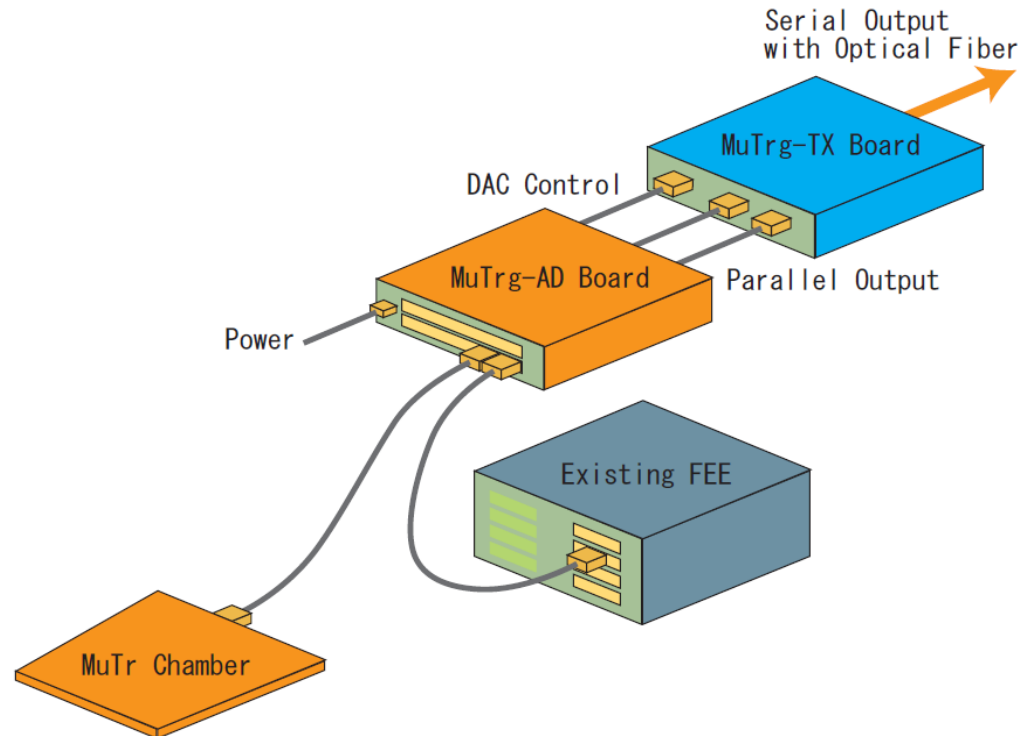
Procedure for replacing PMT

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- Clean PMT and cookie face with alcohol and wipes
- Apply grease to prism and attach PMT
- Tape PMT to prism with black electrical tape (taping involves several steps to ensure light tightness, *difficult to perform with one person when not on bench top*)
- Attach plastic cap and screw back on
- RTV notch in plastic cover
- Place PMT back on end of arm and secure with plastic ties



MuTr FEE Upgrade Prototype

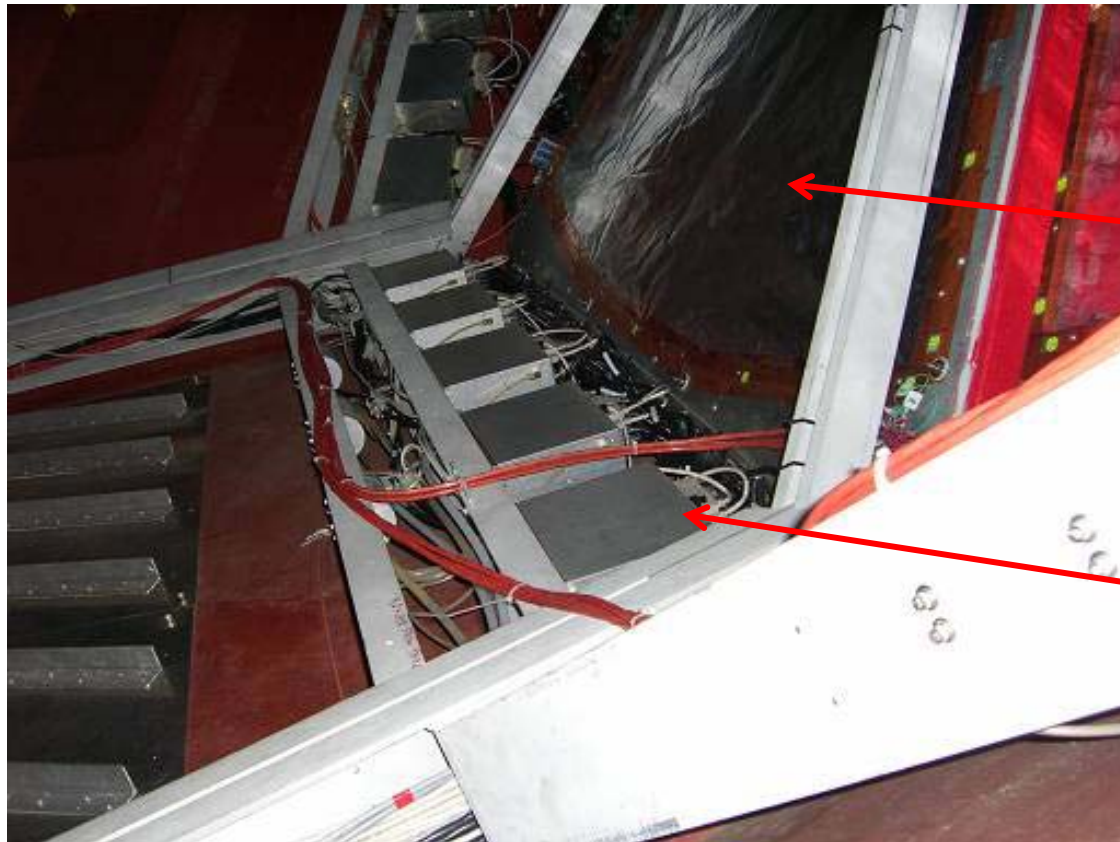


Station 2:
5 AD board Chassis
3 TX board Chassis

Station 1:
3 AD-Board Chassis
2 TX-Board Chassis

- AD & TX boards were installed.
- Kenny help with mechanical installation
- John T. help with air & water issues
- Frank T. & Paul G. & Steve B. help with electrical & cabling

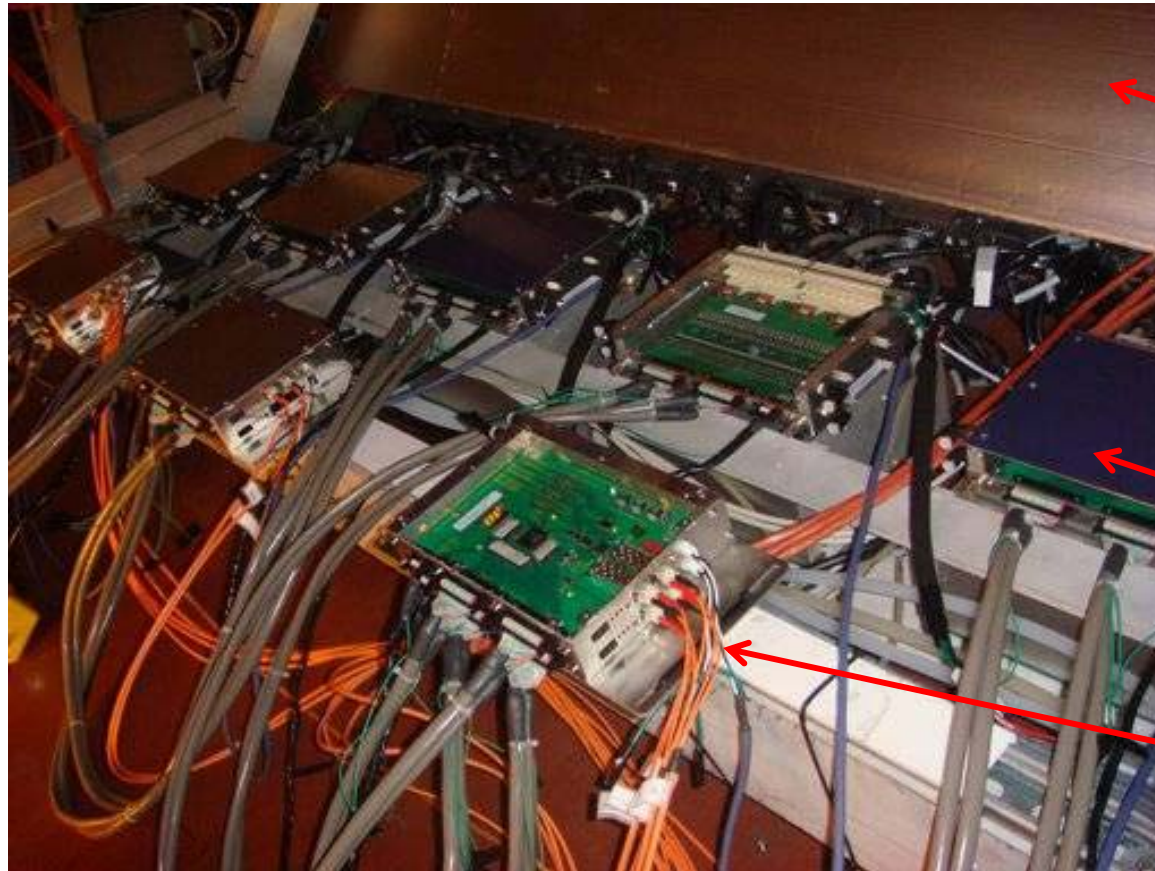
Station 2 (octant 8)



MuTr Chamber

Existing FEE

Station 2 (octant 7)



MuTr Chamber

AD boards
1.5A/board

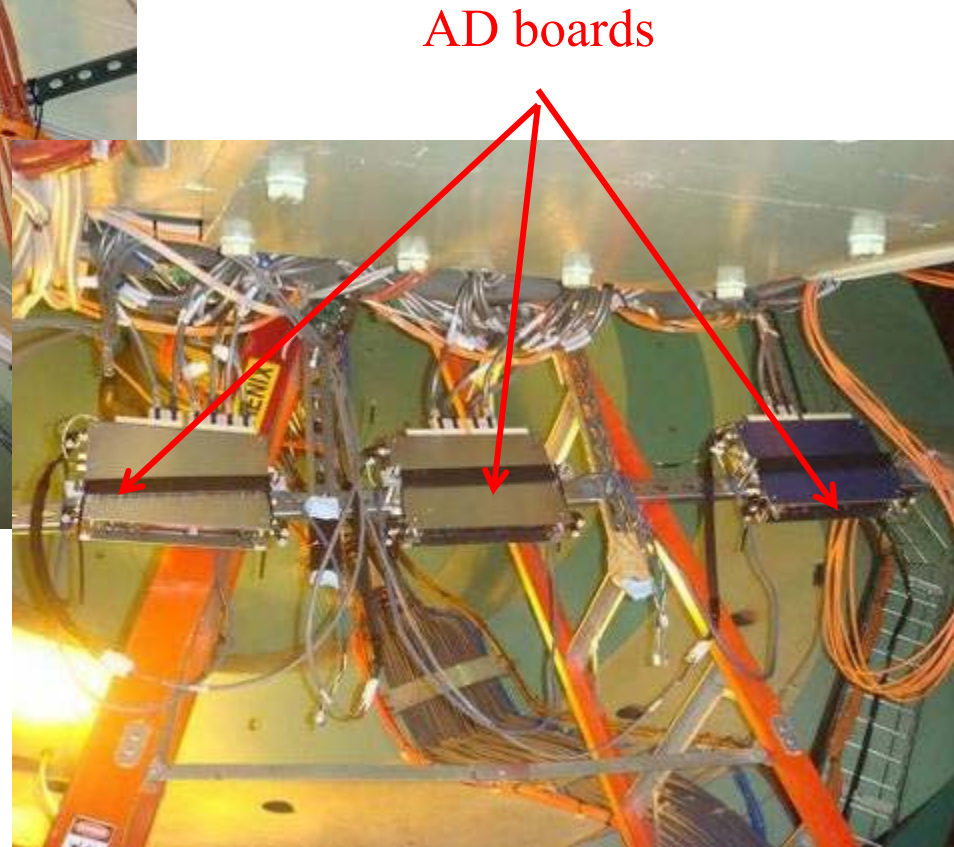
TX boards
1A/board

6 new LV power lines in station 2
LV current = 2-3 A for each line

Station 1



Interfere with man lift operation?



Schedules

- This week
 - Station 2 installation completed (Mon)
 - Station 1 installation completed (Wed)
 - Preparation for cosmic ray measurement with full set up (Mon-Wed)
 - CF4 start flowing (Wed)
 - Reviewed PHENIX alarm system and emergency procedure by shift crews (Wed)
 - Cooling water and dry air in station 2 (Today)
 - Flammable gas safety permission in progress (Today)
 - Isobutane start flowing (Today)
 - Start 24h shift and data taking with cosmic rays will start from Aug. 30 (This evening).
- Long range
 - Accumulation of cosmic data (till Sep. ~14)

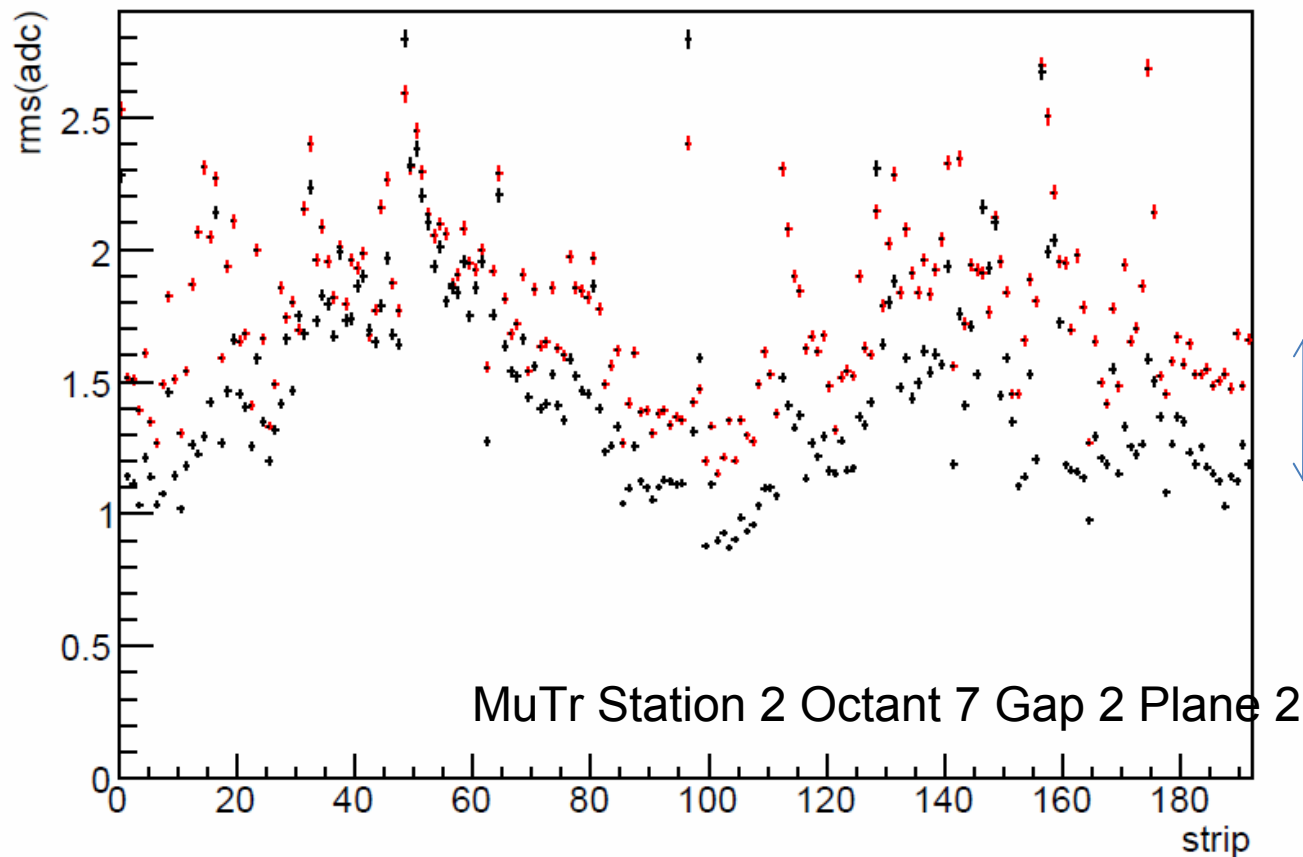
Achievements

- Analog noise level

Current FEE only

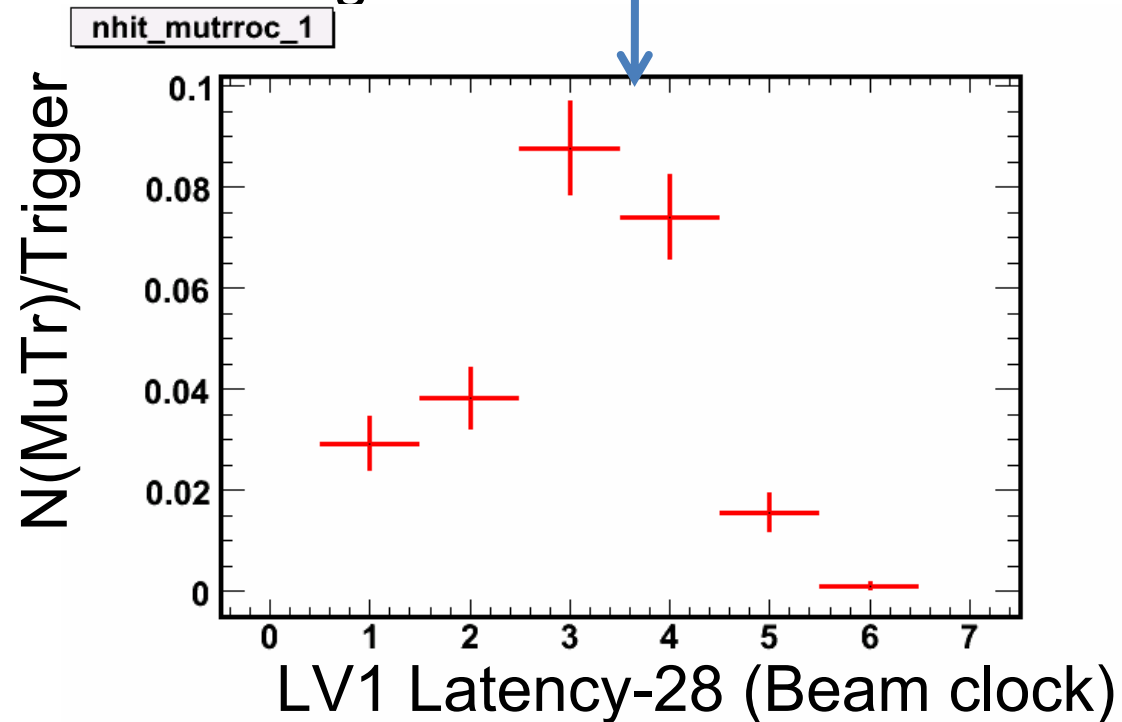
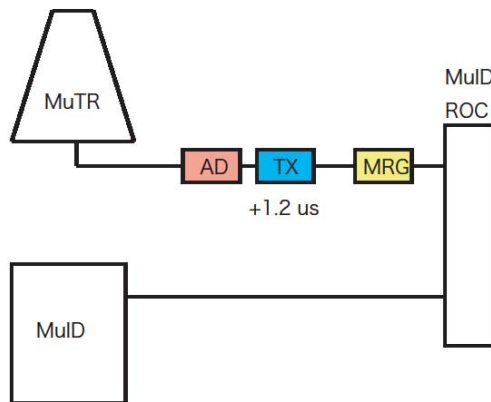
After addition of AD+TX board

Pedestal RMS : All sample



Achievements

- Full chain data processing
 - MuTr → AD board → TX board → MRG board → MuID ROC
 - Work on “time-in” the MuTr signal to MuID ROC is in



Requests

- Gas
 - CF₄ (MuTr)
 - Isobutan (MuID)
- Cooling water and dry air
 - station 2 (Aug. 30)
 - No cooling water in station 1 if safety regulation allows.
(weight concerns, data w/o water)
- DAQ
 - Standalone calibration
 - Big partition
 - MuTrFEE test
 - MuTr + MuID + (RxNP)
 - Disk space
 - Buffer box (a) ~2000GB free
 - ~200 GB/day
- Electricities
 - HV (MuID, MuTr, RxNP)
 - LV (MuID, MuTr, RxNP)



- TEC Support

Drill & Tap grounding port for TEC
grounding braid (currently uses platform
rail mounting hole - subject to accidental
disconnect when removing rail)

- Neutron shielding test (4' x 4' x 2" borated
polyethylene

Shield support design in progress
Install in September for Run 8 tests

- Empty (except clean metal waste) and
discard old container
- NCC prototype & electronics Mike L. &
Richie
- VTX prototype aluminum support strips
needed for flimsy plexi test box
also Rachid needs a fridge



Safety/Security Notes:

1. DOE team visit continues until 8/31

Keep everything nice and clean.

Things to know if asked: All work is planned

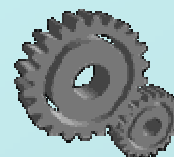
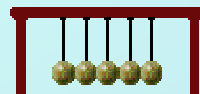
2. First Results of ISM review: New directives from Lab Director:

- a. Wearing shorts to work: *"I am directing that this practice be discontinued immediately and the requirements of SBMS be enforced by all levels of supervision. This is applicable to all BNL people - employees, guests, contractors, students, etc - all who work or visit such areas."*
- b. Sharing ESH Info: *"my direction in this area is that all performance information you capture or develop (including processes and products such as Organizational Self-Assessments, Tier I findings, critiques, etc) must be made accessible to us at the institutional level upon request. This is effective immediately."*
- c. Illness/Injury Investigation: *"all TRC and DART cases will be investigated by the line organization as has been our practice, but will include an additional person or persons designated by me, the Deputy for Science and Technology or the Deputy for Operations. The same process will be used for selected other investigations."*

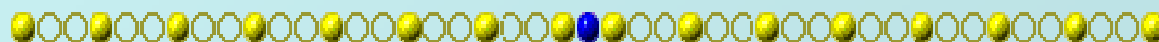
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| 2007 | HBD Repairs, DC (minor) repairs), MPC N&S upgrade, MuTr FEE upgrade prototype, infrastructure upgrades & repairs, misc. subsystem work |
| 2008 | MuTr FEE upgrades 1 octant 1&2 S, Cu absorber test, RPC3 S, infrastructure upgrades & repairs, misc. subsystem work |
| 2009 | Scaffolding in MMS and MMN, MuTr FEE N&S stn. 2 & 3, MuTr N&S stn. 2 & 3 repairs, RPC2 S&N, RPC3 N, Cu absorbers, infrastructure upgrades & repairs, misc. subsystem work |
| 2010 | Remove HBD & RXNP, remove beampipe, DC West upgrade, VTX barrel, RPC1 N&S, MuTr FEE stn. 1 N&S, MuTr stn. 1 N&S repairs, infrastructure upgrades & repairs, misc. subsystem work |
| 2011 | NCC S, FVTX, infrastructure upgrades & repairs, misc. subsystem work |
| 2012 | NCC N, upgrades contingency & wishlist, infrastructure upgrades & repairs, misc. subsystem work |

** Years refer to the shutdown year and follow the run with the similar number (i.e. work in 2007 is to be done in the shutdown that follows run 7, and so on)*

Where To Find PHENIX Technical Info



Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

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